AIR QUALITY PERMIT

Issued To: Specialty Surgical Products, Inc.
1131 U.S. Highway 93 North
Victor, MT 59875

Permit #3237-00
Application Complete: 1/30/03
Preliminary Determination Issued: 3/11/03
Department Decision Issued: 03/27/03
Permit Final: 04/12/03
AFS #081-0007

An air quality permit, with conditions, is hereby granted to Specialty Surgical Products, Inc. (Specialty Surgical Products), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.740, *et seq*., as amended, for the following:

Section I: Permitted Facilities

A. Permitted Equipment

Specialty Surgical Products operates a manufacturing facility that produces silicon-based devices used in medical procedures. A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

B. Location

Specialty Surgical Products is located in the Southwest ¼ of Section 31, Township 7 North, Range 20 West, in Ravalli County. The physical address is 1131 North U.S. Highway 93, Victor, Montana 59875.

Section II: Conditions and Limitations

A. Emission Limitations

1. The Volatile Organic Compound (VOC) emissions from the facility shall be limited to 52.3 tons during any rolling 12-month time period (ARM 17.8.749).

2. Specialty Surgical Products shall not cause or authorize to be discharged into the atmosphere from any sources, stack emissions that exhibit 20% opacity or greater averaged over 6-consecutive minutes (ARM 17.8.304).

B. Testing Requirements

1. All compliance source tests must be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

2. The Department may require testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. Specialty Surgical Products shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.
Production information shall be gathered on a calendar-year basis and submitted

to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

2. Specialty Surgical Products shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745(1) that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit.

   The notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).

3. Specialty Surgical Products shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. The records compiled in accordance with this permit shall be maintained by Specialty Surgical Products as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

4. Specialty Surgical Products shall document, by month, the VOC emissions from the facility. By the 25th day of each month, Specialty Surgical Products shall total the VOC emissions from the facility during the previous 12 months to verify compliance with the limitation in Section II.A.1. The calculation of VOC emissions is based on the amount (percentage) of VOCs in each of the process raw materials as shown in the Material Safety Data Sheets included in the application. All VOCs in the raw materials are assumed to be emitted to the ambient air during the process operations. Any change in the raw materials or VOC contents must be documented by Specialty Surgical Products with new or updated Material Safety Data Sheets submitted as necessary. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.749).

Section III: General Conditions

A. Inspection - Specialty Surgical Products shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

B. Waiver - The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Specialty Surgical Products fails to appeal as indicated below.

C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving Specialty Surgical Products of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).

D. Enforcement - Violations of limitations, conditions, and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401, *et seq.*, MCA.

E. Appeals - Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing postpones the effective date of the Department's decision until the conclusion of the hearing and issuance of a final decision by the Board. The Department's decision on the application is not final unless 15 days have elapsed and there is no request for a hearing under this section.

F. Permit Inspection - As required by ARM 17.8.755 Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.

G. Permit Fee - Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Specialty Surgical Products may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

H. Construction Commencement - Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked.

Permit Analysis
Specialty Surgical Products, Inc.
Permit #3237-00

I. Introduction/Process Description

A. Permitted Equipment

Specialty Surgical Products, Inc. (Specialty Surgical Products) owns and operates a manufacturing facility. The facility is located in the Southwest ¼ of Section 31, Township 7 North, Range 20 West in Ravalli County, Montana. The physical address is 1131 North U.S. Highway 93, Victor, Montana 59875. Equipment used at the facility includes, but is not limited to the following:

1. Two curing ovens
2. Six heaters – combined heat rate 557,625 BTU/hr
3. Two boilers – combined heat rate 598,000 BTU/hr
4. One alcohol fume hood
5. One paint hood

B. Source Description

The facility includes two process buildings where silicon-based devices used in medical procedures such as plastic surgery are produced. Volatile Organic Compound (VOC) emissions, primarily xylene and some ethyl benzene, result from the product manufacturing process. Xylene and ethyl benzene are listed Hazardous Air Pollutants (HAPs). Mandrels are dipped in a xylene/silicon mixture and allowed to partially dry. The process is repeated until the desired product thickness is obtained. Formed products are then placed in curing ovens to complete the drying process. Isopropyl alcohol is used to clean the products. A spray paint hood is used for product coating on an as-needed basis. Both buildings contain natural gas-fired heating equipment.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department of Environmental Quality (Department). Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 - General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment, and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to

any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq*., Montana Code Annotated (MCA).

Specialty Surgical Products shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.

5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

B. ARM 17.8, Subchapter 2 – Ambient Air Quality, including, but not limited to:

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
5. ARM 17.8.223 Ambient Air Quality Standard for PM_{10}

Specialty Surgical Products must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Specialty Surgical Products shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no

person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.

5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. (5) Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions.

6. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). This facility is not an NSPS affected source because it does not meet the definition of any NSPS subpart defined in 40 CFR Part 60.

D. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Specialty Surgical Products submitted the appropriate permit application fee for the current permit action.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

E. ARM 17.8, Subchapter 7 – Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a facility to obtain an air quality permit or permit alteration if they construct, alter or use any air contaminant sources that have the potential to emit greater than 25 tons per year of any pollutant. Specialty Surgical Products has the potential to emit more than 25 tons per year of VOCs; therefore, an air quality permit is required.

3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule

identifies the activities that are not subject to the Montana Air Quality Permit program.

4. ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that are not subject to the Montana Air Quality Permit Program.

5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. This rule requires that a permit application be submitted prior to installation, alteration or use of a source. Specialty Surgical Products submitted the required permit application for the current permit action.

   This rule also requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Specialty Surgical Products submitted an affidavit of publication of public notice for the January 10, 2003, issue of the *Ravalli Republic*, a newspaper of general circulation in the city of Hamilton in Ravalli County, as proof of compliance with the public notice requirements.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana (Act), and rules adopted under those acts.

7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.

8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.

9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Specialty Surgical Products of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.

10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.

11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Act, the Federal Clean Air Act (FCAA), rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, subchapters 8, 9, and 10.

14. ARM 17.8.765 Transfer of Permit. This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8, Subchapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.

2. ARM 17.8.818 Review of Major Stationary Sources and Major Modification--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the Federal Clean Air Act (FCAA) that it would emit, except as this subchapter would otherwise allow.

   This facility is not a major stationary source since it is not a listed source and the facility's potential to emit is less than 250 tons per year of any pollutant (excluding fugitive emissions).

G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:

   a. Potential to Emit (PTE) > 100 tons/year of any pollutant;

   b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or

   c. PTE > 70 tons/year of PM_{10} in a serious PM_{10} nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #3237-00 for Specialty Surgical Products, the following conclusions were made.

   a. The facility's PTE is less than 100 tons/year for any pollutant.

   b. The facility's PTE is greater than 10 tons/year for any one HAP and greater than 25 tons/year of all HAPs.

   c. This source is not located in a serious PM_{10} nonattainment area.

   d. This facility is not subject to a current NSPS.

   e. This facility is not subject to any current NESHAP standards.

   f. This source is not a Title IV affected source nor a solid waste combustion unit.

   g. This source is not an EPA designated Title V source.

Specialty Surgical Products's facility is subject to Title V Operating Permit requirements because the source's potential HAP emissions are above the major source threshold. Specialty Surgical Products must obtain a Title V operating permit from the Department.

III. Best Available Control Technology (BACT) Determination

A BACT determination is required for each new or altered source. Specialty Surgical Products shall install on the new or altered source the maximum air pollution control capability, which is technically practicable and economically feasible, except that BACT shall be utilized.

A BACT analysis was performed by Specialty Surgical Products and reviewed by the Department for VOC emissions from the facility. The following table lists the control technologies that were evaluated followed by the estimated cost/ton of pollutant removed as presented in the application.

-	Vapor-phase granular activated carbon (GAC), 2 systems (Single Use) -	$50,576
-	Vapor-phase GAC, 2 systems (Regenerative System) -	15,635
-	Thermal Oxidation (Direct Flame) -	27,617
-	Thermal Oxidation (Direct Flame w/ Catalytic Conv.) -	19,328
-	Thermal Oxidation (Regenerative) -	10,307
-	Refrigeration/Distillation -	112,994

- Granular activated carbon systems remove VOCs through absorption by the activated (heated) carbon. Thermal oxidation systems combust/oxidize VOCs. Refrigeration and distillation systems are based on cooling of the gas resulting in condensing of the VOCs and collection. VOC control/removal efficiencies of 95 percent were assumed for each of the technologies reviewed.

Specialty Surgical Products currently operates with no VOC controls and proposed to continue operating with no controls. Based on the relatively small amount of emissions and high

incremental cost per ton figures shown above, the Department concurs with that determination. No comparative VOC emission control information was found for this specific type of facility; however, this analysis is consistent with VOC emission control analyses for other types of facilities.

No additional control for criteria pollutants from natural gas combustion was determined to be BACT for the small heaters and boilers used for space heat at this facility given the small amount of emissions and prohibitive costs for control.

IV. Emission Inventory

Tons/Year (based on 8760 operating hours per year)

Source	TSP	PM_{10}	NO_x	VOC	CO	SO_x
Lauren Cook Exhaust Fans – Buildings A&B	0	0	0	51.80	0	0
Despatch Cure Ovens (2) – Building B	0	0	0	0.03	0	0
Forced Air Heating Units – Building A	0.02	0.02	0.24	0	0.21	0
Denver Boilers (2) – Building B	0.02	0.02	0.26	0.01	0.22	0
Fugitive Emissions – Buildings A&B	0	0	0	0.20	0	0
Total	0.04	0.04	0.50	52.04	0.43	0

- The VOC column includes HAPs totaling 50.1 tons per year of total xylenes (P-xylene, M-xylene and O-xylene) and 2.2 tons per year of ethyl-benzene. Emissions are calculated on the assumption that all VOCs contained in purchased raw materials are emitted as shown in the table below. .
- A complete emission inventory for Permit #3237-00 is included in the application and is on file with the Department.

HAP EMISSION CALCULATIONS - The material usage (gallons per year) shown in this table is based on 4437 operating hours per year (the current actual hours). The final total extrapolates the emissions to 8760 hours per year reflecting the potential to emit (PTE) consistent with the table above.

Raw Material	% Xylene	tpy	% Ethyl-benzene	tpy	%Isopropyl Alcohol	tpy
50011 2-Part Si Suspension (Med 10 6400) -7580 gallons, Sp. Gr. 1	66	20.5	0	0	0	0
50012 2 Part Si Suspension (Med 6400) -140 gallons, Sp. Gr. 1	66	0.4	0	0	0	0
1-Part Si Suspension (AA001-OEM) -940 galllons, Sp. Gr. 0.87	51	1.8	13	0.4	0	0
Xylene, Electronics Grade (50014) -655 gallons, Sp. Gr. 0.87	79	1.9	21	0.5	0	0
Xylene, Electronics Grade (50014- OEM) -270 gallons, Sp. Gr. 0.87	79	0.8	21	0.2	0	0
70% Isopropyl Alcohol (20001) -414 gallons, Sp. Gr. 0.85	0	0	0	0	70	1.0
100% Isopropyl Alcohol (20023) -197 gallons, Sp. Gr. 0.786	0	0	0	0	100	0.6
Total - 4437 operating hour/yr		25.4		1.1		1.6
Total - 8760 operating hour/yr		50.1		2.2		3.2

CRITERIA POLLUTANT EMISSION CALCULATIONS

Natural Gas Fuel Combustion

--Heaters
Heat Input Value: 0.557625 MMBtu/hr (Company Information) Combined value for 6 heaters
Hours of Operation: 8760 hr/yr
Fuel Heating Value: 0.001 MMScf/MMBtu

PM Emissions:

All PM emissions assumed to be PM_{10} emissions (AP-42, Table 1.4-2, 07/98)

PM_{10} Emissions:
Emission Factor: 7.6 lb/MMScf (AP42, Table 1.4-2, 07/98)
Calculations: 7.6 lb/MMScf * 0.557625 MMBtu/hr * 0.001 MMScf/MMBtu = 0.0004 lb/hr
0.0004 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.019 ton/yr

NO_X Emissions:
Emission Factor: 100 lb/MMScf (AP42, Table 1.4-1, 07/98)
Calculations: 100 lb/MMScf * 0.557625 MMBtu/hr * 0.001 MMScf/MMBtu = 0.0.056 lb/hr
0.0056 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.0244 ton/yr

VOC Emissions:
Emission Factor: 5.5 lb/MMScf (AP42, Table 1.4-2, 07/98)
Calculations: 5.5 lb/MMScf * 0.557625 MMBtu/hr * 0.001 MMScf/MMBtu = 0.0003 lb/hr
0.0003 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.0013 ton/yr

CO Emissions:
Emission Factor: 84 lb/MMScf (AP42, Table 1.4-1, 07/98)
Calculations: 84 lb/MMScf * 0.557625 MMBtu/hr * 0.001 MMScf/MMBtu = 0.0468 lb/hr
0.0468 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.205 ton/yr

SO_X Emissions:
Emission Factor: 0.6 lb/MMScf (AP42, Table 1.4-2, 07/98)
Calculations: 0.6 lb/MMScf * 0.557625 MMBtu/hr * 0.001 MMScf/MMBtu = 0.0001 lb/hr
0.0001 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.004 ton/yr

--Boilers
Heat Input Value: 0.598 MMBtu/hr (Company Information) Combined value for 2 boilers
Hours of Operation: 8760 hr/yr
Fuel Heating Value: 0.001 MMScf/MMBtu

PM Emissions:

All PM emissions assumed to be PM_{10} emissions (AP-42, Table 1.4-2, 07/98)

PM_{10} Emissions:
Emission Factor: 7.6 lb/MMScf (AP42, Table 1.4-2, 07/98)
Calculations: 7.6 lb/MMScf * 0.598 MMBtu/hr * 0.001 MMScf/MMBtu = 0.0045 lb/hr
0.0045 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.020 ton/yr

NO_X Emissions:
Emission Factor: 100 lb/MMScf (AP42, Table 1.4-1, 07/98)
Calculations: 100 lb/MMScf * 0.598 MMBtu/hr * 0.001 MMScf/MMBTU = 0.0598 lb/hr
0.0598 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.262 ton/yr

VOC Emissions:
Emission Factor: 5.5 lb/MMScf (AP42, Table 1.4-2, 07/98)
Calculations: 5.5 lb/MMScf * 0.598 MMBtu/hr * 0.001 MMScf/MMBtu = 0.0033 lb/hr
0.0033 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.014ton/yr

CO Emissions:

Emission Factor:	84 lb/MMScf (AP42, Table 1.4-1, 07/98)
Calculations:	84 lb/MMScf * 0.598 MMBtu/hr * 0.001 MMScf/MMBtu = 0.050 lb/hr
	0.050 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.22 ton/yr

SO_X Emissions:

Emission Factor:	0.6 lb/MMScf (AP42, Table 1.4-2, 07/98)
Calculations:	0.6 lb/MMScf * 0.598 MMBtu/hr * 0.001 MMScf/MMBtu = 0.0004 lb/hr
	0.0004 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.002 ton/yr

V. Air Quality Impacts

The amount of emissions generated by the operation will not exceed any ambient standard.

VI. Taking or Damaging Implication Analysis

As required by 2-10-101 through 2-10-105, MCA, the Department conducted a private property taking and damaging assessment and determined that there are no taking or damaging implications.

VII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air and Waste Management Bureau
P.O. Box 200901, Helena, Montana 59620
(406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued For: Specialty Surgical Products, Inc.
1131 North U.S. Highway 93
Victor, MT 59875

Permit Number: 3237-00

Preliminary Determination Issued: 03/11/03
Department Decision Issued: 03/27/03
Permit Final: 04/12/03

1. *Legal Description of Site*: The facility is located in the SW¼ of Section 32, Township 7 North, Range 20 West, in Ravalli County, Montana.

2. *Description of Project*: The current permit action would allow the operation of a manufacturing facility that produces silicon-based devices that are used in medical procedures. The process description is discussed in Section I.B. of the permit analysis of Permit #3237-00.

3. *Objectives of Project*: The objective of the project would be to generate business and revenue for the company and to supply the surgical products, which are manufactured for use in medical procedures.
4. *Alternatives Considered*: In addition to the proposed action, the Department considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Specialty Surgical Products demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

5. *A Listing of Mitigation, Stipulations, and Other Controls*: A listing of the enforceable permit conditions and a permit analysis, including a BACT analysis, would be contained in Permit #3237-00.

6. *Regulatory Effects on Private Property*: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and would not unduly restrict private property rights.

7. The following table summarizes the potential physical and biological effects of the project on the

human environment. The "no-action" alternative was discussed previously.

Potential Physical and Biological Effects							
		Major	Moderate	Minor	None	Unknown	Comments Included
A.	Terrestrial and Aquatic Life and Habitats			X			yes
B.	Water Quality, Quantity and Distribution			X			yes
C.	Geology and Soil Quality, Stability and Moisture			X			yes
D.	Vegetation Cover, Quantity and Quality			X			yes
E.	Aesthetics			X			yes
F.	Air Quality			X			yes
G.	Unique Endangered, Fragile or Limited Environmental Resource			X			yes
H.	Demands on Environmental Resource of Water, Air and Energy			X			yes
I.	Historical and Archaeological Sites			X			yes
J.	Cumulative and Secondary Impacts			X			yes

SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic life and Habitats

Emissions from the operation would affect terrestrial and aquatic life and habitats in the project area. However, any emissions and resulting impacts from the operation would be minor due to the low concentration of the pollutants emitted and dispersion characteristics of pollutants and the atmosphere.

The operation would continue to take place within two existing buildings and no new construction or ground disturbance to the area would be required. Overall, any impact to the terrestrial and aquatic life and habitats of the project area would be minor.

B. Water Quality, Quantity and Distribution

The operation would not affect water quantity or distribution in the project area. The operation would continue to take place within two existing buildings and would not discharge process water as part of the project.

Emissions from the project would affect water quality in the project area. However, as described in Section 7.F of this EA, any emissions and resulting deposition impacts from the project would be minor due to the low concentration of the pollutants emitted and dispersion characteristics of pollutants and the atmosphere.

C. Geology and Soil Quality, Stability, and Moisture

The operation would affect the geology, soil quality, stability, and moisture of the project area. The operation would continue to take place within two existing buildings and no new construction or ground disturbance to the area would be required.

Further, the operation would result in minor air pollution emissions to the ambient environment. These pollutants would deposit on the soils in the surrounding area. Any impact from deposition of these pollutants would be minor due to dispersion characteristics of pollutants and the atmosphere and the low concentration of the pollutants emitted.

D. Vegetation Cover, Quantity, and Quality

Emissions from the operation would affect vegetation cover, quantity, and quality in the project area. However, as described in Section 7.F of this EA, any emissions and resulting impacts from the project would be minor.

Further, the operation would continue to take place within two existing buildings and no new construction or ground disturbance to the area would be required. Therefore, any impact to vegetation cover, quantity, and quality from facility construction would be minor. Overall, any impact to the vegetation cover, quantity, and quality of the project area would be minor.

E. Aesthetics

The operation would have minor, if any, impacts on the aesthetic nature of the project area because the operation would continue to take place within two existing building and no new construction would be required. In addition, visible emissions from the source would be limited to 20% opacity. Further, noise generated by the operation would be minor due to the nature of the business. Overall, the operation would have only minor impacts to the aesthetics of the project area.

F. Air Quality

The operation would result in a very small amount of emissions of criteria pollutants as shown in Section IV of the permit analysis. These emissions would have little or no impact on ambient air quality.

The Department conducted air dispersion modeling to determine the ambient air quality impacts that would be generated from HAPs that would be emitted by the operation. The Screen View model was used for the air dispersion modeling. The full meteorology option was selected to provide a conservative result. Receptors were placed from 0 to 5000 meters in a simple terrain array. Simple terrain receptors were used to represent the topography of the project area. Stack parameters and emission rates used in the Screen View model are contained in Section V of the application and are on file with the Department. Modeled HAPS concentrations were then used in a health risk assessment as described in Section 8.E of this EA.

Due to dispersion characteristics of pollutants and the atmosphere and the low levels of pollutants that would be emitted from the project, and the results of the dispersion modeling and health risk assessment, the Department determined that any impacts to air quality would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

In an effort to identify any unique endangered, fragile, or limited environmental resources in the

area, the Department contacted the Montana Natural Heritage Program, Natural Resource Information System (NRIS). The NRIS search identified four species of special concern in the vicinity of the project area. These species include the Westslope Cutthroat Trout, Bull Trout, Fringed Myotis, and Kitchen Creek Mountainsnail. The search area was defined by the section, township, and range of the proposed location with an additional 1-mile buffer zone. Due to the fact that no construction would be required, the low levels of pollutants that would be emitted by the project, dispersion characteristics of pollutants and the atmosphere, and conditions that would be placed in Permit #3237-00, the Department determined that the chance of the project impacting any species of special concern would be minor.

H. Demands on Environmental Resource of Water, Air, and Energy

The operation would result in minor demands on environmental resources of water and air as discussed in Sections 7.B and 7.F of this EA. In addition, as summarized in Section 7.F of this EA, the project's impacts on air resources in the area would be minor due to dispersion characteristics of pollutants and the atmosphere and the low concentration of pollutants emitted. Finally, because the operation is small by industrial standards, a relatively small amount of energy would be required for operation, and the resulting impact on energy resources would be minor. Overall, the demands on the environmental resources of water, air, and energy would be minor.

I. Historical and Archaeological Sites

In an effort to identify any historical and archaeological sites near the project area, the Department contacted the Montana Historical Society, State Historic Preservation Office (SHPO). Two sites were identified. The sites identified are the historic Woodside Bridge and a historic homestead. SHPO indicated that because there will be no new ground disturbance, there is a low likelihood cultural properties would be impacted.

J. Cumulative and Secondary Impacts

Overall, the cumulative and secondary impacts on the physical and biological aspects of the human environment in the immediate area would be minor due to the relatively small size of the operation. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as outlined in Permit #3237-00.

8. The following table summarizes the potential economic and social effects of the project on the human environment. The "no-action" alternative was discussed previously.

Potential Economic and Social Effects							
		Major	Moderate	Minor	None	Unknown	Comments Included
A.	Social Structures and Mores				X		yes
B.	Cultural Uniqueness and Diversity				X		yes
C.	Local and State Tax Base and Tax Revenue			X			yes
D.	Agricultural or Industrial Production			X			yes
E.	Human Health			X			yes
F.	Access to and Quality of Recreational and Wilderness Activities				X		yes
G.	Quantity and Distribution of Employment				X		yes
H.	Distribution of Population				X		yes
I.	Demands for Government Services			X			yes
J.	Industrial and Commercial Activity				X		yes
K.	Locally Adopted Environmental Plans and Goals				X		yes
L.	Cumulative and Secondary Impacts			X			yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The Department has prepared the following comments.

A. Social Structures and Mores

The operation would not have any effect on any native or traditional lifestyles or communities (social structures or mores) of the proposed area of operation because the project is small by industrial standards. The predominant use of the surrounding area is mixed agricultural, commercial, and residential and would not change as a result of the project.

B. Cultural Uniqueness and Diversity

The operation would not have any effect on cultural uniqueness and diversity of the proposed area of operation because the project is small by industrial standards. The predominant use of the surrounding area would not change as a result of the project.

C. Local and State Tax Base and Tax Revenue

The project would have a minor impact on the local and state tax base and tax revenue. The project is small by industrial standards; thus, any economic impact to the area would be minor. No increase in the current employment would result from this permitting action.

D. Agricultural or Industrial Production

Because the operation would continue to be located within two existing buildings, the project would

not displace any land used for agricultural or industrial production.

E. Human Health

A health risk assessment was conducted to determine if the operation would comply with negligible risk criteria based on inhalation risk. The specific pollutants included in the analysis were xylenes and ethyl-benzene. There is no cancer potency factor associated with these two pollutants. The calculated non-cancer hazard quotient was 0.402, which is less than the 1.0 level required to demonstrate compliance with negligible risk criteria. Therefore, the operation meets the criteria for negligible risk to public health, safety, welfare, and to the environment. Overall, any impacts to human health in the project area would be minor.

F. Access to and Quality of Recreational and Wilderness Activities

Because the facility would continue to operate within two existing buildings, the project would not affect any access to or quality of any recreation or wilderness activities in the area.

G. Quantity and Distribution of Employment

The operation would not result in any change in current employment in the area. Therefore, the project would not have an impact on the quantity and distribution of employment in the area.

H. Distribution of Population

The operation would not result in any change in current employment in the area. Therefore, the project would not have an impact on the distribution of population in the project area.

I. Demands for Government Services

Government services would be required for acquiring the appropriate permits from government agencies. In addition, the permitted source of emissions would be subject to periodic inspections by government personnel. Demands for government services would be minor.

J. Industrial and Commercial Activity

The operation would not result in an impact on local industrial and commercial activity because the project would operate in two existing buildings, would require no new construction, and would not result in additional industrial production.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans or goals in the immediate area affected by the project. The state standards would be protective of the project area.

L. Cumulative and Secondary Impacts

Overall, cumulative and secondary impacts from this project would result in minor impacts to the

economic and social aspects of the human environment in the immediate area due to the relatively small size of the operation. Due to the relatively small size of the project, the industrial production, employment, and tax revenue (etc.) would not be impacted by the project. In addition, the Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in Permit #3237-00.

Recommendation: An EIS is not required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the continued operation of a manufacturing facility. Permit #3237-00 includes conditions and limitations to ensure that the facility would operate in compliance with all applicable rules and regulations. In addition, as detailed in the above EA, there are no significant impacts associated with the project.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Natural Heritage Program, National Resource Information System (NRIS) and Montana Historical Society, State Historic Preservation Office (SHPO).

Individuals or groups contributing to this EA: Department of Environmental Quality Permitting and Compliance Division (Air and Waste Management Bureau), Montana Natural Heritage Program, State Historic Preservation Office.

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